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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,680	11/30/1999	MITSUJI MARUMO	35.G2504	8003

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EXAMINER

RAO, SHRINIVAS H

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

10

Office Action Summary	Application No. 09/450,680	Applicant(s) MARUMO, MITSUJI	
	Examiner Steven H. Rao	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-33 and 41-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 22-33 and 41-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/05 & 12/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement is made of papers filed on November 30, 2005 claiming priority from U.S. Serial No. 09/450, 680 which itself claims priority from Japanese Patent Application No. 357007/1998 filed on December 02, 1998.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 30, 2005 has been entered on December 05, 2005.

Therefore claims 22 and 28 as amended by the amendment and claims 23 to 27 and 29-33 as previously recited are currently pending in the Application. Claims 41 to 52 are presently newly added.

Information Disclosure Statement

The IDS filed on 12/05/2005 and 12/12/2005 have been considered and the initialed copy of the PTO-1449s enclosed herewith .

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22- 33 and 41 to 52 are rejected under 35 U.S.C. 103 (a) as being unpatentable over AAPR (Applicants' Admitted Priori Art) in view of Drake et al. (U.S. Patent No. 5,006,760, herein after Drake). (for response to Applicants' arguments –see section below).

With respect to claim 22, AAPR describes a pod for attachment to an outside surface of a grounded electromagnetic-shielded chamber having a door and a grounded flange portion, around the door, on the outside surface and containing a device manufacturing apparatus for processing a substrate, said pod comprising : Walls for containing the substrate (AAPR figure 10) and a lid for an opening defined by the walls ,(AAPR specification page 30 line 29 to page 3 lines24) for transferring the substrate between said pod and the grounded electromagnetic -shielded chamber .

The limitation , "for transferring the substrate between said pod and the grounded elect has been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 (1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279.

The remaining limitations of claim 22 :

wherein said walls comprise an electro magnetic shield member, said electromagnetic shield member including a portion to contact the grounded electromagnetic-shielded chamber during the attachment of said pod to the grounded electromagnetic -shielded chamber.

AAPR describes in specification page 3 lines 17-20 shield metal chambers for EMI protection, it does not specifically mention an electromagnetic shield member provided by said walls.

However Drake in figures 1 , etc. and col. 2 lines 25-31 describes an electromagnetic shield to formed on outer surface that protects the wafer inside from electromagnetic radiation. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Drake's pod including an electro magnetic shield in AAPR'S device for shield metal chamber the to form an outer surface that protects the wafer inside from electromagnetic radiation.

(The limitation including a portion to contact the grounded electromagnetic-shielded chamber during the attachment of said pod to the grounded electromagnetic -shielded chamber is described in Drake figure 1, chamber 10 connected to ground through 26).

With respect to claim 23 , AAPR describes a pod according to claim 22, wherein said lid is arranged in front of said pod . (AAPR page 2 lines 29 to page 3 line 12).

With respect to claim 24, AAPR describes a pod according to claim 22, wherein said lid is arranged in a bottom of said pod. (AAPR page 2 lines 29 to page 3 line 12).

With respect to claim 25, APPR describes a pod according to claim 22, wherein said electromagnetic shield member comprises wire mesh arranged on or within said walls. (APPR spec. page 3 lines 21-22).

With respect to claim 26, APPR describes a pod according to claim 22, wherein said electromagnetic shield member comprises metal coatings arranged on said walls. (APPR spec. page 3 lines 17-18 , inherent instead of the shielded metal covering metal covering can be used).

With respect to claim 28, APPR describes an apparatus for manufacturing a device using a substrate, said apparatus comprising : an electromagnetic-shielded chamber, (APPR specification page 3) a transfer unit in said electromagnetic -shielded chamber, (APPR specification page 1 lines 14,24-27, etc.) for transferring the substrate between said electromagnetic shielded chamber (The limitation , "for transferring the substrate between said pod and the grounded electromagnetic -shielded chamber" is taken to be a intended use recitation. It is has been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 (1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279) and a pod attached to an outside surface of said electromagnetic-shielded chamber (see rejection of claim 22 above) and a processing unit (MPR figure 10, specification page 1 lines 25-27) for performing a process using the substrate transferred into said electromagnetic - shielded chamber from the pod by said transfer unit, (intended use see above) wherein said electromagnetic shielded

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chamber has a grounded portion to provide a grounded connection to the attached pod.
(Drake figure 1 chamber 10 connected to ground through 26).

With respect to claim 29, AAPR describes an apparatus according to claim 28, wherein said electromagnetic-shielded chamber comprises a door through which said transfer unit transfers the substrate between said electromagnetic -shielded chamber and the pod, (MPR figure 10, specification page 4 lines 17-35) said grounded portion is arranged around said door. (AAPR figure 10) .

With respect to claim 30, AAPR describes an apparatus according to claim 28, wherein the process performed by said process unit is exposure of the substrate to a pattern. (AAPR specification page 3 lines 25-35)

With respect to claim 31, AAPR describes an apparatus according to claim 28, wherein a lid of the pod is arranged in front of the pod. (AAPR specification page 3 lines 4-10)

With respect to claim 32, AAPR describes an apparatus according to claim 28, wherein a lid of the pod is arranged in a bottom of the pod. (AAPR page 2 line 32-34)

With respect to claim 33, AAPR describes an apparatus according to claim 28, wherein the walls of the pod comprises an electromagnetic shield member. (Drake figure 1 , col. Lines 25-31 , etc.).

B. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) and Drake et al. (U.S. Patent No. 5,006,760, herein after Drake) as applied to claims 22-26 etc. above and further in view of

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Akagawa (U.S. Patent No. 4,856,904 herein after Akagawa) .

With respect to claims 27 and 35 wherein said electromagnetic shield comprises shielding materials provided in walls of said pod.

AAPR and Drake do not specifically mention shielding materials provided in walls of the pod.

However, Akagwa fig.2 # 46, 47 and col.2 line 64 and col. 6 lines 64-68 describes shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Akagwa's shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

With respect to claim 41 Maney describes an improved pod (Maney fig.2 # 90) for attachment to an outside surface of a grounded electromagnetic-shielded chamber (10) having a door (99) and a flange portion, around the door, on the outside surface (50) and containing a device manufacturing apparatus for processing a substrate (15) , said pod including walls for containing the substrate(90 in fig. 4 has walls) said walls including a flange portion to contact the flange portion of the grounded electromagnetic-shielded chamber; and a lid for an opening, defined by said walls, through which the substrate is transferred between said pod and the grounded electromagnetic-shielded chamber, the improvement comprising: an electromagnetic shield member, said

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electromagnetic shield member covering said walls and arranged on said flange portion of said walls. (AAPR figures and specification) .

With respect to claim 42 AAPR describes a pod according to Claim 41, wherein said lid is arranged in a front of said Pod. (APPR figures spec. Page 2 line 29 to page3 line12).

With respect to claim 43 AAPR describes a pod according to Claim 41, wherein said lid is arranged in a bottom of said pod. (APPR figures spec. Page 2 line 29 to page3 line12).

With respect to claim 44 AAPR describes a pod according to Claim 41, wherein said electromagnetic shield member comprises wire mesh arranged on or within said walls. (AAPR spec. page3 lines 21-22).

With respect to claim 45 AAPR describes a pod according to Claim 41, wherein said electromagnetic shield member comprises metal coatings arranged on said walls.

With respect to claim 46 describes a pod according to Claim 41, wherein said electromagnetic shield member comprises electromagnetic-shield materials arranged in said walls. (AAPR spec. page 3 lines 17-18, inherent instead of the shielded metal covering metal coating can be used).

With respect to claim 47 AAPR describes an improved device manufacturing apparatus for processing a substrate, said apparatus including a grounded electromagnetic-shielded chamber having a door and a flange portion, around said door, on an outside surface of said grounded electromagnetic-shielded chamber (AAPR figure10, specification page page 30 line 29 to page 31 line 24) ; a transfer unit,

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arranged in said grounded electromagnetic-shielded chamber (AAPR specification page 3 lines 4-10) , configured to transfer the substrate between said grounded electromagnetic-shielded chamber and a pod, the pod attached to the outside surface and having a flange portion to contact said flange portion of said grounded electromagnetic-shielded chamber (AAPR figure 10, spec. page 4 lines 17-35); and a processing unit, arranged in said grounded electromagnetic-shielded chamber, (AAPR specification page 3 lines 25-35) configured to process the substrate transferred into said grounded electromagnetic-shielded chamber from the pod by said transfer unit, improved in that: said flange portion of said grounded electromagnetic-shielded chamber is grounded. (AAPR figure 10).

The limitation , "for processing a substrate , configured to transfer the substrate, configured to process the substrate, for transferring the substrate between said pod and the grounded elect has been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 (1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279.

With respect to claim AAPR 48 describes an apparatus according to 47, wherein said transfer unit (AAPR figure 10) is configured to transfer the substrate between said grounded electromagnetic-shielded chamber and the pod through said door.

The limitation , ' is configured to transfer the substrate between said grounded electromagnetic-shielded chamber and the pod through said door has been held that an

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intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 (1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279.

With respect to claim 49 AAPR describes an apparatus according to 47, wherein said processing unit (AAP% specification page 3 lines 25-35) "is configured to expose the substrate to a pattern. "has been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 (1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279.

With respect to claim 50 AAPR describes an apparatus according to Claim 47, wherein a lid of the pod is arranged in a front of the pod. (AAPR Page 2 lines 29 to page 3 line 12).

With respect to claim 51 AAPR describes an apparatus according to Claim 47, wherein a lid of the pod is arranged in a bottom of the pod. (AAPR page 2 line 29 to page 3 line 12).

With respect to claim 52 AAPR describes an apparatus according to Claim 47, wherein the pod includes walls for containing the substrate, and a lid for an opening, defined by the walls, through which the substrate is transferred by said transfer unit, the walls including the range portion of the pod, an electromagnetic shield member covering

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the walls and arranged on the flange portion of the walls. (rejected for reasons set out under claim 28 , etc.above).

Response to Arguments

Applicant's arguments filed on 01/05/2005 have been fully considered but they are not persuasive. for the following reasons :

Applicants' argument is based on improper piece meal analysis of individual refines whereas the rejection is based on the combined teachings of AAPR (primary reference) and Drake (Secondary reference). See In re Keller 208 USPQ 871(CCPA 1981).

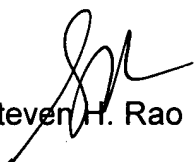
Applicants' were shown to be not persuasive for reasons set out at length and explained at the at least two/three interviews , and incorporated here by reference for the sake of brevity, wherein Applicants' representative Jack Cubert agrees to all the Examiner's suggestions to present the claims in proper format etc. and at least twice after interviews the promised amendment are not filed. Therefore further interviews will only be conducted if they produce results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is (571)272-1718. The examiner can normally be reached on 8.00 to 5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fahmy Wael can be reached on (571) 272-1714. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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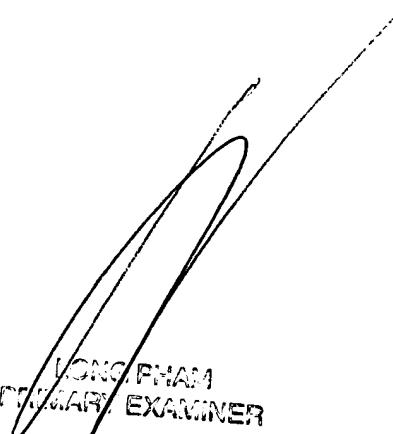
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Steven H. Rao

Patent Examiner

Feb. 28, 2006.



LONG PHAM
PATENT EXAMINER